PCT/EP2003/00671

# **PCT**

PATENT COOPERATION TREATY

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 020276WO	FOR FURTHER ACTIO	N See Notifi Preliminary	cation of Transmittal of International Examination Report (Form PCT/IPEA/416)
International application No.	International filing date (de	ry/month/year)	Priority date (day/month/year)
PCT/EP2003/006713	25 June 2003 (25.		25 June 2002 (25.06.2002)
International Patent Classification (IPC) or G10K 11/172			
Applicant		מאר מאינותים	иа
,	CARCOUSTICS TECH	LENIER GIVI	BA
This international preliminary exa and is transmitted to the applicant	mination report has been prepared according to Article 36.	ared by this Inter	national Preliminary Examining Authority
2. This REPORT consists of a total of	of5 sheets, incl	uding this cover	sheet.
This report is also accomps amended and are the basis 70.16 and Section 607 of the section for	onied by ANNEXES, i.e., shoo	ts of the descript intaining rectific under the PCT).	ion, claims and/or drawings which have been ations made before this Authority (see Rule
These annexes consist of a	total or since		
This report contains indications re	clating to the following items:		
I Basis of the repor	t		
П Priority			4. 495
III Non-establishmen	at of opinion with regard to no	velty, inventive s	step and industrial applicability
IV Lack of unity of i			
v Reasoned statem citations and exp	ent under Article 35(2) with re lanations supporting such state	gard to novelty, i	inventive step or industrial applicability;
VI Certain documen	is cited		
VII Certain defects in	n the international application		
VIII Certain observati	ions on the international applic	cation	
		·	
Date of submission of the demand	D	ate of completion	of this report
•			
19 January 2004 (19.	.01.2004)	07.	February 2005 (07.02.2005)
Name and mailing address of the IPEA/I	EP A	uthorized officer	
9			
Facsimile No.	Т	elephone No.	

Form PCT/IPEA/409 (cover sheet) (July 1998)



International application No.

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L Basis of the report								
1. With	regard to	the elements of the international application:*						
	-	mational application as originally filed						
		cription:						
	pages	1, 4-9 , as originally filed						
	pages	, filed with the demand						
	pages	2, 2a, 2b, 3, 3a , filed with the letter of 28 December 2004 (28.12.2004)						
M								
	the clai	as originally filed						
	pages	, as amended (together with any statement under Article 19						
	pages	, filed with the demand						
	pages	1-14 , filed with the letter of28 December 2004 (28.12.2004)						
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	the dra							
	pages	Cld with the demand						
	pages pages	, filed with the letter of, nied with the demand						
	the seque	ence listing part of the description:						
	pages	, as originally filed						
	pages	, filed with the letter of, filed with the demand						
]	pages							
2. With	regard	to the language, all the elements marked above were available or furnished to this Authority in the language in which						
the r	nternatio se elemer	nal application was filed, unless otherwise indicated under this item.  this were available or furnished to this Authority in the following language which is:						
	the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).							
		nguage of publication of the international application (under Rule 48.3(b)).						
		nguage of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/						
	or 55.3							
3. Wit	n regard	to any nucleotide and/or amino acid sequence disclosed in the international application, the international examination was carried out on the basis of the sequence listing:						
	contai	ntained in the international application in written form.						
	filed t	together with the international application in computer readable form.						
	fumis	shed subsequently to this Authority in written form.						
	furnis	hed subsequently to this Authority in computer readable form.						
	The s	statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the national application as filed has been furnished.						
	The s	tatement that the information recorded in computer readable form is identical to the written sequence listing has furnished.						
4.	The a	mendments have resulted in the cancellation of:						
		the description, pages						
		the claims, Nos.						
		the drawings, sheets/fig						
5.	This rebeyone	eport has been established as if (some of) the amendments had not been made, since they have been considered to go d the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**						
• Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and arc not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).								
		ment sheet containing such amendments must be referred to under tiem 1 and annexed to this report.						

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<ul> <li>Reasoned statement under Article 3.</li> <li>citations and explanations supportion</li> </ul>	5(2) with regard to novelty, ag such statement	inventive step or industrial app	icability;
1. Statement			
Novelty (N)	Claims	1-14	YES
	Claims		NO NO
Inventive step (IS)	Claims	1-14	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		мо

#### 2. Citations and explanations

1. Reference is made to the following document:

D1: EP-A-0 454 949 (FREUDENBERG CARL FA) 6 November 1991 (1991-11-06)

### 2. INDEPENDENT CLAIM 1

D1 is considered the prior art closest to the subject matter of claim 1. D1 discloses (the references in brackets are to that document):

A sound absorber with a moulded part made of thermoplastic plastics (polypropylene) and at least one second part (3) which delimits a cavity with the moulded part, there being formed on the moulded part a plurality of pin-like spacers which project into the cavity and are directed towards the second part, the exterior of the moulded part having a plurality of depressions, each of which extends into a spacer.

Therefore the subject matter of claim 1 differs from the known sound absorber in that the mean outer diameter of each spacer is smaller than the mean length thereof.

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Consequently the subject matter of claim 1 is novel (PCT Article 33(2)).

The problem addressed by the present invention can thus be considered that of increasing the performance of the sound absorber.

In order to solve this problem, spacers whose mean outer diameter is smaller than their mean length are used, which scarcely decreases the acoustic volume of the air-filled cavity in the sound absorber and thereby increases the performance thereof.

This solution cannot be found in the searched prior art, nor would a person skilled in the art arrive at the subject matter of claim 1 on the basis of the available document. The subject matter of claim 1 therefore involves an inventive step (PCT Article 33(3)).

#### 3. DEPENDENT CLAIMS 2 TO 14

Claims 2 to 14 are dependent on claim 1 and hence likewise meet the PCT novelty and inventive step requirements.